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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,090	06/27/2003	Joseph Gan	42931B	7578

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THE DOW CHEMICAL COMPANY  
INTELLECTUAL PROPERTY SECTION,  
P. O. BOX 1967  
MIDLAND, MI 48641-1967

EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/609,090	<b>Applicant(s)</b> GAN ET AL.	
	<b>Examiner</b> Robert Sellers	<b>Art Unit</b> 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 16-25 is/are pending in the application.
- 4a) Of the above claim(s) 18-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

This is responsive to the Request for Continued Examination (RCE) filed August 18, 2006.

This application contains claims 18-25 drawn to inventions nonelected with traverse in the non-Final rejection mailed June 7, 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144 and MPEP § 821.01).

The text of section 103(a) of Title 35, U.S. Code not included in this action can be found in the non-Final rejection.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent No. 458,502 and PCT Publication No. 96/12751 in view of Schutyser et al. Patent No. 5,821,305; Japanese Patent Nos. 9-25349 and 9-194610 and Soviet Union Patent No. 448,742.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schutyser et al. and Japanese '349 and '610 in view of the European patent and PCT publication.

The rejections are maintained for the reasons of record set forth in the previous Office actions. The arguments filed August 18, 2006 have been considered but are unpersuasive.

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1. The comparison in Tables I and II on pages 48 and 51 of the specification between Comparative Example 1 containing 3.2 parts by weight of dicyandiamide shown in the European and PCT references (page 10, Example 1) vs. Example 3 with 41 parts by weight of styrene-maleic anhydride copolymer is inconclusive. The use of different epoxy resins in diverse amounts, the absence of boric acid in Comparative Example 1, the different imidazoles and organic solvents at different concentrations, and the presence of tetrabromobisphenol A in Example 3 could contribute to the diverse dissipation factors  $D_f$  and  $T_g$  reported in Table II. The significantly varied proportions of crosslinker could also affect the tested properties, especially since there is no indication that the equivalent ratio of the active groups of the crosslinker to the epoxy groups of the epoxy resin has been held constant.
2. The singular effect of the claimed copolymer of an ethylenically unsaturated compound and vinyl compound has not been isolated by holding constant the types and amounts of other materials as well as the equivalent ratio of active groups of the crosslinker to epoxy groups of the epoxy resin. Furthermore, the evidence is not commensurate in scope with the claims because the experimentation with only 98.8 parts by weight of styrene-maleic anhydride copolymer (calculated from 41 pbw per 41.5 pbw of combined epoxy resins) does not establish the criticality of the claimed range of from 40 to 150 parts per 100 parts of polyepoxide.

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3. The cited comparison is not germane to the rejection wherein Schutyser et al. and Japanese '349 and '610 are primary references since the basis for the rejection is the motivation to complex the imidazole catalyst with the boric acid inhibitor of the European patent and PCT publication in order to control the gel time (European patent, page 4, line 58 to page 5, line 1) and inhibit the activity of the catalyst during B-staging (PCT publication, page 7, lines 23-24)." The motivation has been clearly elucidated and is consistent with the teachings of the primary references.

This is a RCE of applicant's earlier Application No. 10/609,090. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

rs

12/5/2006



**ROBERT SELLERS  
PRIMARY EXAMINER**